

REMARKS

This paper responds to the Office Action mailed December 28, 2007.

37CFR1.83(a) objections

In response to the objections to the drawings, it is noted that the computing device 24 is shown in Figure 13 on Sheet 1 of 4 of the drawings, as explained at page 17 line 2. It is also explained that the function of the processor 24 carries out the functions of the error detection 12 and performance monitoring 14.

It is therefore respectfully submitted that the drawings objections are in error.

35 USC 112 rejections

In response to the rejections under 35 USC 112, claims 20 and 36 have been amended to include additional features of the processor/control logic. Claim 20 has been amended require an input for receiving an incoming signal to which performance monitoring is to be applied and an input for receiving a clock signal. Thus, claim 20 includes all the circuit features shown in Figure 13. Claim 36 has been amended in similar manner. It is believed that this also addresses the rejections raised against claims 21-35 and 37-38.

35 USC 102 rejections

Claims 1-6, 8, 20-27, 29, and 36-40 stand rejected under 35 U.S.C. 102(e) as being anticipated by Iryami et al.

In response thereto, the independent claims have each been amended to include the feature of previous claim 3 (or claim 24). Furthermore, it is specified that both of the at least two signal quality characterizations are selected from the list in previous claim 3.

The invention as now claimed thus provides a method (and apparatus) in which time intervals are defined during which the signal characterization is constant. The amended claims make clear that the signal characterizations include at least two different levels of error category.

In this way, the record of time intervals provides a representation of the performance of the signal over time in an extremely concise manner, as shown in Figures 4 to 8.

Taking Figure 4 as an example, all four characterizations appearing in the independent claims are used (PT, ES, SES, UAT), and the time interval information enables the evolution of the channel over time to be recognized immediately and with extremely low volume of data required to be stored. This is because time intervals with a constant signal characterization are represented as a single record (i.e. a single row of the log table).

Iryami discloses a bit error tester which performs resynchronisation operations prior to analysis (see abstract). In particular, Iryami is concerned with network paths which suffer loss of synchronization with the bit error rate tester (see column 1). The system of Iryami performs resynchronization of the incoming bit sequence when it is identified that the received sequence is not synchronized. This loss of synchronization is detected based on the detection of "idles" (see column 3 line 39). The resynchronization is step 530 of Figure 5A (see column 10 lines 60-64), before the error analysis of step 545 in Figure 5B.

The relevant parts of Iryami identified by the examiner, in columns 9 and 10, relate to this resynchronization feature (see column 10 lines 27,14,21). Thus, Iryami discloses that information relating to resynchronization events should be stored.

Iryami fails to disclose the generation of a record of time intervals, in which a time interval is defined as a period of time during which an error level, particularly one of the specific error characterizations now specified in the independent claims, remains constant. Thus, Iryami fails to disclose the time interval records as now claimed, and which can enable a low data volume log to be generated.

In fact, Iryami fails to disclose how the measured bit errors are stored. Average bit error rates are calculated, as explained in column 11, but there is no disclosure of how these error rates are then stored.

The invention provides an efficient (low data volume) way of recording error-performance information on the basis of time intervals, and which provides instantly meaningful information to a user. There is no disclosure or suggestion of this approach in Iryami.

Having addressed the rejections raised against all independent claims, it is submitted that the remaining rejections raised against the dependent claims are now moot. Although no discussion of any remaining rejections raised against the dependent claims is given, it should not be taken that the rejections raised are accepted.

It is submitted that this application is now in condition for allowance. Such action is respectfully solicited.

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Respectfully submitted,



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